AMENDMENTS

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

(Currently Amended) A method for optimizing power consumption in at least two
communication devices implementing wireless short range radio-communication,
comprising:

transmitting a low activity request message from one of a polling device and a polled device;

transmitting a low activity response message from the other one of the polling device and the polled device responsive to the low activity request message;

processing the low activity request and response messages to derive a set of accepted parameters associated with a period of low activity for the polling device and the polled device, wherein at least one of the low activity messages contains an indication of a number of polling messages to which the polled device will not respond; and

entering a low activity mode based on the set of accepted parameters, wherein the low activity mode optimizes power consumption in both the polling and polled devices.

- 2. (Cancelled).
- 3. (Currently Amended) The method of claim 1, wherein:

one of the low activity messages <u>further</u> contains an indication of [[the]] <u>a</u> number of polling messages that the polling device may selectively refrain from transmitting during [[a]] <u>the</u> low activity mode.

4. (Currently Amended) The method of claim 1, wherein:

during <u>said</u> processing of the low activity messages, the polling device and the polled device each transmit at least one additional message in deriving the set of accepted parameters.

5. (Currently Amended) The method of claim 4, wherein:

said at least one additional message transmitted by the polled device indicates the number of polling messages to which the polled device will not respond during the low activity mode.

6. (Currently Amended) The method of claim 4, wherein:

said at least one <u>additional</u> message transmitted by the polling device indicates the number of polling messages the polling device may refrain from transmitting during <u>the</u> low activity mode.

- 7. (Original) The method of claim 4, wherein the low activity mode is asymmetrical, wherein the polled device and the polling device enter low activity modes of different time durations.
- 8. (Currently Amended) The method of claim 4, wherein the low activity mode is symmetrical, wherein the polled device and the polling device enter low activity modes of equal time durations.
- 9. (Currently Amended) The method of claim 4, wherein the communication polling and polled devices implement a modified Bluetooth wireless communication protocol.
- **10. (Original)** The method of claim 9, wherein a Bluetooth master device assumes a polling device role.
- 11. (Original) The method of claim 9, wherein a Bluetooth slave device assumes a polled device role.
- 12. (Currently Amended) The method of claim 4, wherein the communication polling and polled devices implement a modified low-end radio wireless communication protocol.

13. (Currently Amended) A An apparatus for optimizing power consumption for a polling device implementing wireless short range radio communication over a data transfer channel, comprising:

a memory for storing configured to store instructions; and

a processor that processes configured to process said instructions stored to cause the polling device to:

transmit from the polling device a low activity request message to a polled device, the low activity request message including proposed low activity parameters, wherein the low activity request parameters specify a proposed number of polling messages the polling device may refrain from transmitting;

receive a low activity response message from the polled device; and conditionally enter a low activity mode for a time interval based on parameters from the low activity messages, wherein the low activity mode optimizes power consumption in the polling device.

- 14. (Cancelled).
- 15. (Currently Amended) The apparatus polling device of claim 13, wherein: the low activity response message accepts the low activity parameters.
- 16. (Currently Amended) The apparatus polling device of claim 13, wherein:

 the low activity response message rejects the low activity parameters in the low activity request message.
- 17. (Currently Amended) The apparatus polling device of claim 16, wherein: the low activity response message includes proposed new low activity parameters.
- 18. (Currently Amended) The apparatus polling device of claim 17, further comprising instructions for causing the polling device to:

transmit an updated low activity request message based on the proposed new low activity parameters from the polling device; and

receive a new low activity response message accepting the updated low activity request message.

- 19. (Currently Amended) The apparatus polling device of claim 13, wherein the polling and polled devices implement a modified Bluetooth communication protocol.
- 20. (Currently Amended) The apparatus polling device of claim 13, wherein the polling and polled devices implement a modified low-end radio communication protocol.
- 21. (Currently Amended) A An apparatus for optimizing power consumption for a polled device implementing wireless short range radio communication over a data transfer channel, comprising:

a memory for storing configured to store instructions; and

a processor that processes configured to process said instructions stored to cause the polled device to:

receive from a polling device a low activity request message including proposed low activity parameters, wherein the low activity parameters specify a number of polling messages occurring before the polled device accesses a data transfer channel;

transmit a low activity response message to the polling device; and eonditionally enter a low activity mode for a time interval based on the low activity parameters included in one of the low activity messages.

- 22. (Cancelled).
- 23. (Currently Amended) The apparatus polled device of claim 21, wherein:

the low activity response message accepts the low activity parameters in the low activity request message.

24. (Currently Amended) The apparatus polled device of claim 21, wherein:

the low activity response message rejects the low activity parameters in the low activity request message.

- 25. (Currently Amended) The apparatus polled device of claim 24, wherein: the low activity response message includes proposed new low activity parameters.
- **26.** (Currently Amended) The apparatus polled device of claim 25, further comprising instructions for causing the polled device to:

receive an updated low activity request message based on the proposed new low activity parameters from the polling device; and

transmit a new low activity response message accepting the updated low activity request message.

- **27.** (Currently Amended) The apparatus polled device of claim 21, wherein the polling and polled devices implement a modified Bluetooth communication protocol.
- 28. (Currently Amended) The apparatus polled device of claim 21, wherein the polling and polled devices implement a modified Low End Radio communication protocol.
- 29. (Currently Amended) A method for optimizing power consumption for a short range wireless communication device implementing a polling protocol, comprising:

transmitting polling messages to at least one polled device according to a general polling mode and a request to the at least one polled device to enter a low activity polling mode, wherein the low activity mode request includes a number of polling messages to which the polled device may refrain from responding;

receiving a response message from the at least one polled device, containing a response to the low activity mode request;

conditionally entering a low activity polling mode, wherein during the low activity polling mode either or both of the polling device and the polled device refrain

from accessing [[the]] <u>a</u> data transfer channel for a time interval in accordance with an accepted set of low activity polling mode parameters.

- **30.** (Original) The method of claim 29, wherein the time interval is derived from a negotiation between the polling and polled devices.
- 31. (Original) The method of claim 29, wherein:

a periodicity of polling message transmissions in the low activity polling mode is specified in the transmitted low activity mode request.

- 32. (Original) The method of claim 29, wherein the general polling mode further comprises: the periodicity associated with transmitting the polling messages is defined by a fixed time-interval, wherein said fixed time-interval commences following receipt of said response message.
- 33. (Original) The method of claim 29, wherein the general polling mode further comprises: the periodicity associated with transmitting the polling messages is defined by a fixed time-interval, wherein said fixed time-interval commences at the end of a previous polling message, if no response message has been detected.
- 34. (Currently Amended) The method of claim 29, wherein:

the low activity mode is asymmetrical, whereby the at least one polled device abstains from responding to at least one of the polling messages; and

a number of polling messages to which the at least one polled device can abstain from responding to is specified in a parameter defined in the low activity mode request.

35. (Currently Amended) The method of claim 29, wherein:

the low activity mode is asymmetrical, whereby the polling device abstains from transmitting at least one of the polling messages; and

a number of polling messages to which the polling device can refrain from transmitting is specified in a parameter defined in the low activity mode request.

36. (Original) The method of claim 29, further comprising:

transmitting a message modifying the low activity time-interval after low activity data transfer has occurred.

37. (Original) The method of claim 29, further comprising:

conducting carrier sensing multiple access with collision avoidance for determining that there are no transmission conflicts prior to transmitting polling messages.

38. (Currently Amended) A An apparatus for optimizing power consumption for a short range wireless communication device implementing a polling protocol, comprising:

a memory for storing configured to store instructions; and

a processor that processes configured to process said instructions stored to cause the communication device to:

transmit polling messages to at least one polled device according to a general polling mode and a request to the at least one polled device to enter a low activity polling mode, wherein the low activity polling mode request includes at least one of a number of polling messages to which the communication device will not respond and a number of polling messages that the communication device will refrain from transmitting during the low activity polling mode;

receive a response message from the at least one polled device, containing a response to the low activity polling mode request;

enter a low activity polling mode, wherein during the low activity polling mode either or both of the polling communication device and the polled device refrain from accessing [[the]] a data transfer channel for a time interval in accordance with an accepted set of low activity polling mode parameters.

39. (Currently Amended) The apparatus communication device of claim 38, wherein the time interval is derived from a negotiation between the polling communication device and polled device[[s]].

The following NEW claims are now presented for consideration by the Examiner:

40. (New) A computer-readable medium, comprising:

a computer-executable program stored in said computer-readable medium, wherein said computer-executable program includes instructions to cause a communication device to:

transmit polling messages to at least one polled device according to a general polling mode and a request to the at least one polled device to enter a low activity polling mode, wherein the low activity polling mode request includes at least one of a number of polling messages to which the communication device will not respond and a number of polling messages that the communication device will refrain from transmitting during the low activity polling mode;

receive a response message from the at least one polled device, containing a response to the low activity polling mode request;

enter a low activity polling mode, wherein during the low activity polling mode either or both of the communication device and the polled device refrain from accessing a data transfer channel for a time interval in accordance with an accepted set of low activity polling mode parameters.

41. (New) The computer-readable medium of claim 40, wherein the time interval is derived from a negotiation between the communication device and the polled device.